

CLAIMS

1. An information processing apparatus comprising:
 - means for storing content data;
 - a controlling means having a software which controls storage or read of the content data into or from the content data storage means; and
 - means provided in a hardware independent of the controlling means to decrypt and execute an encrypted program supplied from the controlling means and supply the result of the program execution to the controlling means;
 - the controlling means controlling the content data storage or read to or from the content data storage means based on the program execution result supplied from the program executing means.
2. The apparatus as set forth in Claim 1, wherein:
 - the content data storage means stores also management information with which the content data stored in itself is managed; and
 - the controlling means makes the program executing means execute a predetermined computation based on the management information.
3. The apparatus as set forth in Claim 1, wherein:
 - the controlling means is a CPU;
 - the content data storing means is a hard disc; and
 - the program executing means is a CPU incorporated in a semiconductor IC

other than a one in which the CPU as the controlling means is built.

4. An information processing method for use in an information processing apparatus comprising:

means for storing content data;

a controlling means having a software which controls storage or read of the content data into or from the content data storage means; and

means provided in a hardware independent of the controlling means to decrypt and execute an encrypted program supplied from the controlling means and supply the result of the program execution to the controlling means;

the method comprising a step of:

controlling storage or read of content data into or from the content data storage means based on the result of the program execution by a program executing means.

5. A program storage medium for use in an information processing apparatus comprising:

means for storing content data;

a controlling means having a software which controls storage or read of the content data into or from the content data storage means; and

means provided in a hardware independent of the controlling means to decrypt and execute an encrypted program supplied from the controlling means and supply the result of the program execution to the controlling means;

the program storage medium being intended for use in the controlling means

and having recorded therein a computer-readable program comprising a step of controlling storage or read of the content data into or from the content data storing means based on a result of a program execution by the program executing means.

6. An information processing apparatus comprising:

means for inputting content data;

means for storing the content data supplied from the input means;

means for compressing the content data stored in the content data storing means in a predetermined manner;

means for encrypting the data stored in the content data storing means in a predetermined manner; and

means for controlling storage or read, into or from the content data storing means, of the content data compressed by the compressing means and encrypted by the encrypting means.

7. The apparatus as set forth in Claim 6, wherein the compressing means compresses, or the encrypting means encrypts, different data supplied from the input means in the same manner.

8. The apparatus as set forth in Claim 6, wherein the compressing means compresses, or encrypting means encrypts, different data supplied from the input means in the same manner, and takes a predetermined common compressing or encrypting manner for outputting the data read from the content data storing means to a predetermined apparatus.

9. An information processing method comprising the steps of:

inputting data;

storing the data supplied from the data input step;

compressing the data stored at the data storing step in a predetermined manner;

encrypting the data stored at the data storing step in a predetermined manner;

and

controlling storage or read of the data compressed at the compressing step and encrypted at the encrypting step.

10. A program storage medium having recorded therein a program intended for execution by an information processing apparatus and readable by a computer, the program comprising the steps of:

inputting data;

storing the data supplied from the data input step;

compressing the data stored at the data storing step in a predetermined manner;

encrypting the data stored at the data storing step in a predetermined manner;

and

controlling storage or read of the data compressed at the compressing step and encrypted at the encrypting step.

11. An information processing apparatus comprising:

means for inputting content data;

means for storing the content data supplied from the content data input means;

means for holding management information for the content data stored in the content data storing means;

means for making a predetermined computation based on the management information held in the management information holding means; and

means for controlling the usage of the content data stored in the content data storing means according to a result of a comparison made between the result of the computation made by the computing means and that of a past computation which is stored in the content data storing means.

12. The apparatus as set forth in Claim 11, wherein the computing means makes the computation using a hash function as the management information.

13. The apparatus as set forth in Claim 11, wherein the data is music data and the management information includes identification information for identification of the music data.

14. An information processing method comprising the steps of:

inputting data;

storing the data supplied at the data input step;

holding management information for the data stored at the data storing step;

making a predetermined computation based on the management information held at the management information holding step;

storing the result of the computation made at the computing step; and

comparing the result of the computation made at the computing step with a past

computation result stored at the data storing step to control the usage of the data stored at the data storing step.

15. A program storage medium having recorded therein a program intended for execution by an information processing apparatus and readable by a computer, the program comprising the steps of:

- inputting data;
- storing the data supplied from the data input step;
- holding management information for the data stored at the data storing step;
- making a predetermined computation based on the management information held at the management information holding step;
- storing the result of the computation made at the computing step; and
- controlling the usage of the data stored at the data storing step according to a result of a comparison made between the result of the computation made at the computing step and that of a past computation stored at the data storing step.

16. An information processing apparatus comprising:

- means for transmitting and receiving data to and from other apparatus;
- means for holding a predetermined lock key and save key;
- authenticating means which uses the lock key held in the holding means when transmitting and receiving data to and from the other apparatus to make a mutual authentication with the other apparatus to generate a communication key;
- means for encrypting the communication key with the save key; and

means for storing the data received by the data transmitting and receiving means and having been encrypted with the communication key correspondingly to the communication key encrypted by the encrypting means.

17. The apparatus as set forth in Claim 16, further comprising:

an encryption key decrypting means for decrypting the communication key stored in the storing means using the save key; and

means for decrypting the data stored in the storing means.

18. An information processing method comprising the steps of:

transmitting and receiving data to and from other apparatus;

holding a predetermined lock key and save key;

using the lock key held at the holding step when transmitting and receiving data to and from the other apparatus to make a mutual authentication with the other apparatus to generate a communication key;

encrypting the communication key with the save key; and

storing the data received at the data transmitting and receiving step and having been encrypted with the communication key correspondingly to the communication key encrypted at the encrypting step.

19. A program storage medium having recorded therein a program intended for execution by an information processing apparatus and readable by a computer, the program comprising the steps of:

transmitting and receiving data to and from other apparatus;

holding a predetermined lock key and save key;

using the lock key held at the holding step when transmitting and receiving data to and from the other apparatus to make a mutual authentication with the other apparatus to generate a communication key;

encrypting the communication key with the save key; and

storing the data received at the data transmitting and receiving step and having been encrypted with the communication key correspondingly to the communication key encrypted at the encrypting step.

20. An information processing apparatus comprising:

means for storing data;

means for holding the usage rule for the data stored in the data storing means;

means for judging whether or not, when moving the data stored in the data storing means to other apparatus, the usage rule for the data stored in the data storing means is reproducible by the other apparatus; and

means for moving, based on the result of the judgment by the judging means, the data stored in the data storing means to the other apparatus along with the usage rule for the data stored in the data storing means, which is held in the holding means.

21. The apparatus as set forth in Claim 20, wherein the usage rule for the data includes:

playback limiting condition;

playback accounting condition; or

copy limiting condition.

22. An information processing method comprising the steps of:

storing data;

holding the usage rule for the data stored at the data storing step;

judging whether or not, when moving the data stored at the data storing step to other apparatus, the usage rule for the data stored at the data storing step is reproducible by the other apparatus; and

moving, based on the result of the judgment at the judging step, the data stored in the data storing means to the other apparatus along with the usage rule for the data stored at the data storing step, which is held at the holding step.

23. A program storage medium having recorded therein a program intended for execution by an information processing apparatus and readable by a computer, the program comprising the steps of:

storing data;

holding the usage rule for the data stored at the data storing step;

judging whether or not, when moving the data stored at the data storing step to other apparatus, the usage rule for the data stored at the data storing step is reproducible by the other apparatus; and

moving, based on the result of the judgment at the judging step, the data stored in the data storing means to the other apparatus along with the usage rule for the data stored at the data storing step, which is held at the holding step.